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THE SPASMODIC CHOLERA.

Remarks on the Pathological Character of the prevailing Spasmodic Cholera, and on the Therapeutic Application to it of Remedial Agents. By J. A. ALLEN, M. D. Middlebury, Vt.

[Concluded from page 169.]

THE deranged functions enumerated, occurring either in close succession or at the same time, constitute cholera *spasmodica*. This disorder, happening sporadically or epidemically, appears to be resolved by its own nature into three distinct stages or varieties. These stages, it would seem, in all countries, climates and places, have pretty uniformly been found to succeed each other in a uniform and regular mode of morbid association. The cholera *diarrhæa* has been found to precede the paroxysm of asphyxia, and the asphyxia the typhoid stage, in all uninterrupted and fully developed cases. These stages seem to bear as intimate a relation to each other in the train of causation, as the *cold, hot, and sweating* stages of any of the species of Anetus do to each other. Mere morbid concatenations are probably more readily dis severed by the natural sanative powers of the system, or by well adapted medication in season, than the diseased actions in Anetus are. The natural stages of cholera *spasmodica* may be designated thus—

1. C. S. *Mitis*.
2. C. S. *Asphyxia*.
3. C. S. *Typhoides*.

1. *Mild Spasmodic Cholera, Cholera diarrhæa, Choleroid, or Cholerine.* The characteristic symptom of this modification of the cholera has been represented somewhat different in different places, and at different times. It is usually preceded by a white slimy coat on the tongue, and some abnormal action of the chylopoietic viscera; sinking sensation in the epigastrium, followed by watery dejections, commonly copious and serous; spasmodic actions of the muscular system various, and also the action of the vascular. I have found the pulse in some cases at one hundred and fifty beats in a minute, and in some other cases reduced to fifty; and my friend R. Gowdey, M. D. has found the pulse at forty, and very weak and tremulous. These extremes of augmented irritability and torpidity, denoting atony in opposite states of excitement, however paradoxical it may seem, have unquestionably originated from

the same epidemic cause. The same fact in relation to cholera *diarrhoea* and cholera *asphyxia* is equally certain. The development of the latter disease epidemically has probably occurred in no place unaccompanied by the former. At New York, it was the opinion of Dr. Francis, some time since, that as many as seventy thousand persons had been thus affected. Dr. L. C. Beck, in his late report to Gov. Troup, states that in every place where he had traced the progress of the complaint, stomach and bowel diseases were very common. In India, the same facts were observed. At Paris, a majority of the inhabitants, we have been informed, had suffered from this modification of the epidemic influence before May last. Authenticated records rarely afford an instance of cholera *asphyxia* unpreceded by some abnormal action of the stomach and bowels. From these facts the conclusion appears irresistible that the cholera arises from the same epidemic meteoration that the cholera *asphyxia* does ; and, therefore, *does in reality constitute a part of the same disease*. During the prevalence of the cholera at Orenburg, Dr. Onufriev observes, 'there was scarcely an inhabitant who had not symptoms of indigestion. One complained of oppression in the breast ; another of pain in the head ; some of nausea, diarrhoea, and the like. To me it appears that the cause of these symptoms was a general invasion of the systems of the inhabitants by cholera, which was, however, prevented from developing in its perfect form, by regular manner of living and other similar measures.' In this country, it seems the invasion in many places has been nearly as universal ; and thousands have escaped the stage of asphyxia by regular manner of living, and mild medication at the onset of the incipient diarrhoea. Others, unconscious of their danger, have neglected this modification of the cholera till the sinking stage occurred, and a premature death closed the scene. To correct this error and remove this danger, are the important objects of the present essay. Had the public been apprised that the cholera was the commencement of the cholera, it is presumed thousands of valuable lives would have already been preserved. How often in the present epidemic has a slight *liquid* diarrhoea been neglected, and terminated in collapse and death ? Had an eminent writer in a late number of this Journal been practically acquainted with the present epidemic, he would have found, it is presumed, a greater resemblance between cholera *spasmodica* and typhus *syncopalis* than he has assumed. Dr. Miner might have remarked, in relation to the range of the severity of the former, as Dr. Darwin did in respect to that of *cynanche maligna*, 'that it exists from a flea-bite to the plague.' The cholera, if the preceding views be tenable, exists from a slight affection of the stomach to asphyxia, which when intense is nearly moribund.

2. Cholera *asphyxia*. Had not custom sanctioned the use of the term *asphyxia*, the word *acrotisma* might have been preferred ; because this denotes a defect of pulse merely, whereas *asphyxia* has long been used to denote apparent death, an entire suspension not of the pulse only, but of sensation and voluntary action also ; and in cholera *asphyxia*, seeing, bearing and volition are not much impaired—the pulselessness being in fact the essential distinctive characteristic, with the exception perhaps of the inordinate thirst, between a severe case of cholera and cholera *asphyxia*.

3. Cholera *typhoides*. If the patient survive the paroxysm of subsidentia, the complaint assumes the character of *Enecia Typhus*, or approximates it. Consequently the same remediate course is demanded that is required for typhous fever.

Medication. It is obvious at sight that the therapeutic adaptation of remediate measures to the constantly varying pathological phenomena, must be highly important and in some cases extremely difficult. Guided in this, as in all other complaints, by the morbid phenomena developed at the time, it is believed the indications of cure are all referable to four principal objects.

1. To change the morbid or suspended action of the secretions and exhalants.

Emetics, especially those of an alterative, acrid, or deobstruent kind, have been advantageously used in all stages of the complaint. From the sudden impression which they make, and also from their antispasmodic power, they may prove remediate. Ipecacuan. and tartarized antimony have been found beneficial at the onset of cholera *diarrhæa*. Sulphate of zinc, mustard, and common salt, have each been extolled, and are probably less objectionable than tartar emetic, because less likely to produce exhaustion and to increase the alvine discharges. Mercury, however, from its powerful alterative and deobstruent properties, is the most important agent to fulfil the above indications. Calomel, combined with opium in different proportions, has been found to restore healthy secretions, especially in the choleroïd. Some have preferred large doses of calomel and opium; others small and repeated doses of each. Either will accomplish the object. I prefer *slow purging with calomel and opium*, because if these be administered in sufficient quantity to allay all inordinate discharges and spasms twelve or fourteen hours, and then the calomel be suffered or excited to produce a cathartic operation, sufficient alteration will have been produced on the secretions, and the patient will be speedily well, if the disease has not passed the first stage. Difficulty is sometimes experienced on account of the medicine being immediately rejected from the stomach by puking. In such cases, much advantage is gained by giving the medicine instantly after a paroxysm of puking, and allowing little or nothing to be taken into the stomach for some time after. By this process the stomach will be brought under the influence of the opiate in its quiescent state; before it has time to regain its sensorial power sufficient to reject the medicine, it will be under its calming effects. If the first attempt fail, by repetition the object will be accomplished. The practice of '*washing down the medicine*' with some stimulant liquid is worse than useless, because the liquid from its own distension of the stomach will cause itself, with the other contents of the stomach, to be rejected in cases of considerable increased irritability of that organ. To be effectual, the opium should be in a state of extreme division, either in powder or solution; and sulphuric ether may often be combined with it. Occasionally, the cholera *diarrhæa* has become protracted. In such cases, in this part of the country at least, tonics, in combination with narcotics and acrid stimulants, have been found useful. Cinchona, galangal, cascarilla, &c. either in an aqueous infusion or tincture, or opium, quinine and capsicum, have all been used. In many mild

choleric cases, the simple eccoprotic effect of rhubarb, charcoal, or calcined magnesia, separately or mixed, has been sufficient to remove the disease.

2. *To restore the normal functions of the nervous system.*

The subsidence or unequal distribution of the neuralgic power is probably best removed by the use of acrid excitants, such as ammonia, capsicum, mustard, cantharides, volatile oils, friction and caloric, employed as the nature and circumstances of the case appear to require.

To affect the system of ganglia, counter-irritation may be made in the course of the spine, as practised by M. Petit at the *Hôtel Dieu de Paris*, who places over the spine a strip of flannel wet with a liniment composed of eight parts of spirits of turpentine and one part of aqua ammonia, and passes slowly over it a hot flat-iron. Speedy vesication is produced, the heat returns to the skin, the cramps and vomitings abate, the circulation is re-established, and the patient feels relieved. Steam evolved from heated bricks, and placed around the patient in the bed, may be made to accomplish the same object.

3. *To allay the spasmodic action of the muscular system.*

To accomplish this object, opium given in large doses at regular intervals is probably more to be relied on than any other article. Dr. Sydenham, in the epidemic cholera of 1667, gave twenty-five drops of his laudanum, and repeated it in increased quantity every thirty minutes till the spasms yielded. He then continued the medicine in diminished doses, and at longer intervals, till the recovery was complete. The effect produced, and not the quantity given, is the object of principal moment in violent morbid actions of the muscular system. In cholera cases, however, more caution is necessary, lest the sedative action of the medicine be so great as to augment the natural torpidity of the disease, and by that means induce congestion, inaction and death.

4. *To relieve the subsidence of the vascular system, and restore action in the capillaries.*

Venesection may prove remediate in the incipient stage or in an atonic state of the system by its diminishing vascular action, and by its influence on the secretions, exhalants and nervous system; and also by its increasing the susceptibility to the action of remedial agents. In atonic states, and at the period of asphyxia, more especially those cases in which a great proportion of the serum of the blood has been removed, it can easily be imagined what would be the consequence of taking away the crassamentum also. Nor, indeed, can much more advantage be anticipated from the attempt to obviate the pathological state of the blood by the injection of saline solutions into the veins. If it were possible thus to restore the blood to its healthy state, it would no more cure than the removal of the water by tapping would, in a case of ascites, cure the dropsy. The same pathological state of the vessels that caused the change in the blood would still remain; consequently no more than evanescent results can be rationally expected from this measure.

Electricity and galvanism may be brought to act directly on the nervous system, through the medium of the vascular; but whether these agents are any preferable to other diffusible excitants, as volatile oils, ether, &c., has not, to my knowledge, been experimentally determined. Numerous stimulating lotions and liniments have been used, and when

aided by thorough friction and not counteracted by the admission of cool air or evaporation, are important. A liniment composed of mercurial ointment, camphor and capsicum, is the best which I have seen recommended, on account of its being highly stimulant and alterative.

The preceding imperfect outline will suffice. The pathological phenomena developed in each case, carefully observed, will afford the only correct data by which all remedial measures can rationally and successfully be governed. If I have suggested anything important, it will not be lost; the candid will improve the hint. If not, they will excuse the attempt; my design being to propose to, not to impose upon, their judgment. Hence, in the words of Horace I will close—

⁴ Si quid novisti rectius istis,
Candidus imperti; si non his utere mecum.⁵

October 20, 1832.

PROGRESS OF THE CHOLERA IN ADDISON COUNTY, VT.

THIS County, situated on the eastern shore of Lake Champlain, contains about 25,000 inhabitants. A large proportion of them, between the last of July and the first of October, have experienced some modification of the cholera. Abnormal actions of the bowels, especially diarrhoea of copious white liquid discharges, have been very common, and attended often with spasms and moderate sinking. *Six well-marked cases only, in this time, have run into cholera asphyxia and terminated fatally.* It is evident that many others have escaped the fatal event by early use of remedies in the first stage. J. A. A.

MALIGNANT ASTHENIA.

Remarks on Epidemical Malignant Asthenia. By ELISHA NORTH,
M.D. of New London, Conn.

[Concluded from page 202.]

To show that cholera, like spotted fever, is very various in different places, I will state that I have had an interesting interview in New London, with Dr. De Kay of New York. This gentleman has witnessed the cholera in Constantinople, in Montreal, in Quebec, in Crosby Street Hospital, New York, and elsewhere. He says to me, *that the malady as seen by him is manifested in many forms.* He gave me the following short history. When he first saw this disease in Constantinople, or on board of a ship, he knew not what the complaint was. His first patient died with it. He had, then, however, a faint reminiscence that he had once read, in some book, an account of a similar malady, as regards treatment or the use of stimulants. When he arrived home, he ransacked his library and found the book which had occasioned those reminiscences. It was North's Treatise on Spotted Fever. This to me, as may well be supposed, was gratifying intelligence, and it ought not to displease others. I hold no public office; I therefore need not be watched—to use one of our good republican phrases—lest I might assume improper airs, or have too much temerity. A public writer, or a

physician, cannot expect to suit or convince every one, because our heads are organized differently ; and the fashion as respects style or composition is various.

2. Why should we import from Asia a very deceptive generic name, for a pestilence first known and first described in our own country ? The above remark has no reference to any book preceding that of Dr. Annesley in 1825. The name of cholera morbus had been applied, in my treatise on spotted fever, to *one bad form* of our malignant epidemic, more than twenty years ago ; although that form of the pestilence had not, so long ago, been made manifest so extensively and destructively as has since been the case. The same cholera form of the spotted fever has been noticed by other writers, since my book was published, previous to the present epidemic season. The generic name, then, was petechial or spotted fever, although it was a very deceptive one. But we had, at that time, no better. This name is, however, as good a one as that of cholera, if not better. The term petechial was once applied to many pestilential epidemics. (See Cullen's Nosology.)

3. Dr. James Annesley, in his publication, in London, in 1825, puts the subsequent question—Does the history of medical science furnish any account of the occurrence of an epidemic disease, like the one he is about to describe under the name of Indian Cholera, *in any other part of the globe* ? To this question the learned Doctor gives a negative answer. I have made use of my own words in stating the question. In the Bombay Report, according to Dr. Johnson, it also concluded 'that the epidemic cholera differs from all other known epidemics, and may be said to stand alone.' It is now contended in this country, by a few persons, that a very similar epidemic disease, under a different name, viz. that of Spotted Fever, had occurred in the United States of America and in Canada ; and had been described by various authors, anterior to 1811, i. e. fourteen years previous to Dr. Annesley's publication. That learned author was probably unacquainted with American medical literature. Notwithstanding his ignorance of such literature, his opinions have unfortunately had, even in this country, too much influence for our public good. They have given rise, with other publications, to the highly terrifying and false sentiment, throughout this whole nation or continent, that we have Indian cholera—a dreadful disease—*sui generis*, among us. In my humble, and may be very selfish opinion, it is well for the cause of scientific truth that my life has been spared to set this matter right. Others have, however, helped, particularly Dr. Thomas Miner, in this same cause. This scientific fact, just had in review, shows one evil, which we experience from too much dependence on foreign physicians to teach us how to treat diseases of our own country, instead of learning the difficult art at the bedside of our patients. The scientific error which is now claimed to be rectified, principally by myself and Dr. Miner, could not have been corrected in Europe, for want of that minute and experimental knowledge in regard to spotted fever which we possess in this country. It is hoped that the English and French, from whom we receive so much valuable literature, will not receive this intelligence as *boasting* ; and that they may be willing to be benefited by it.

4. I cannot perceive that any evil can result to society from regarding

the Eastern and the Western epidemic as one pestilence, which has been made manifest somewhat simultaneously on two continents ; the opinion of Dr. Francis, and perhaps others in New York, and elsewhere, to the contrary notwithstanding. All cannot, as the Doctor must be aware, view things precisely alike, in consequence of their different cerebral organization. This must be my excuse to him.

Disapprobation, by many readers who have treated spotted fever, will no doubt be awarded to the Doctor for his powerless attempt to make the public believe that the treatment of spotted fever in New England and elsewhere has been '*unwarrantable*' and '*empirical*,' for twenty-six years past. Charity induces the belief that this attempt of the Doctor was made without due reflection.

September 19th. I have this day visited one patient, sick with our epidemic, in the colic form of spotted fever. This person had vomiting at the attack, as well as a periodical pain of the belly every few minutes, which would occasion him to draw his body forward as often as the pain came. I have little or no doubt he would have had rice-water evacuations, had the disease been allowed to unfold itself naturally. In the afternoon, I visited another patient with the same pestilence, at no great distance from the first, in consultation with Dr. Perkins. This patient had our pestilence in the cholera and collapsed form. He had flocculent, thin, aqueous, inodorous matter, not of a rice-co or exactly, forcibly discharged while I was present. He had hiccough, sunk-en eyes, and a bad pulse. I was told that he had been afflicted with vomiting and rice-water discharges, and spasms of the lower limbs ; that he had cholérine, while at work, for a fortnight previous. The former patient convalesced on the 5th, and the latter died the same day of his disease. Both had consecutive fever.

I have had the misfortune recently to lose a patient of my own, with well-marked symptoms of cholera. I have seen patients this very season die, or I staid by them until they were almost gone, with what was called spotted fever, and have their senses nearly to the last breath. Now shall I believe my own senses, supported by those of Dr. Perkins, or the assertions of the learned Dr. Francis, who has probably never seen the malady in all its diversified forms ? By way of illustration, Dr. F. is reminded that an individual sheep may be black, and another may be white ; yet mankind agree to call both by the common name of sheep.

5. My views have a tendency to allay the public panic, in regard to the hideous Asiatic cholera, as it has been called. If the New York Board of Health had taken such views, previous to their Memorial to Congress, on the subject of Asiatic cholera, we should have suffered much less from a pestilential panic than has been the case. The view upon which they acted was, that such a pestilence had never existed in this country ; and that it was, or might be, progressing towards us by contagion or infection. To this position, and to what follows, the Hon. Gentlemen will doubtless concede ; for useful truth should be the only object with us all. That Memorial, and the Congressional measures which resulted from it, helped powerfully to electrify this whole nation in regard to cholera. The evil of this panic has been almost as great, in one view of the case, as that of cholera. The value of life and comfort

is greatly lessened, if we must live in perpetual fear of death. The publication of every case of cholera, that can possibly be found, even in our very villages and in our somewhat unimportant cities, may keep up this excitement and terror forever, unless such excitement be lessened by habit. If cholera or spotted fever has hitherto occasionally occurred in our country, it may continue to do so ; and too much should not be published concerning it, having reference to the timidity and comfort of society. The promulgation of true science, however, should not be interfered with. I say *too much* publication, because the use of the public press in some measure may be needful to prevent oral misrepresentations and marvellousness. The last evils may not, however, be so extensive as *those which may be occasioned by an injudicious public press.*

6. New London, or the Board of Health for this city, have first set a most excellent example to almost the whole Christian world, in regard to cholera. I say *Christian world*, because, according to Dr. De Kay's account, the Turkish authorities have always been sensible that quarantine regulations, by exciting fear, were worse than useless. It has been the policy, in New London, to lessen pestilential and unhappy excitement as much as possible, in regard to cholera. We are gratified to learn that other places begin to follow our example. We, the citizens of New London, have derived much benefit from our management, in another point of view. The excitement in New York, last spring, was so great, that, in all probability, we should have been subjected to the great evils of quarantine regulations in that city, if that excitement had not been moderated by the name of spotted fever, which was then given to our pestilence by some of our influential citizens who were in New York at that time.

It may appear to some persons in New York that sinister motives have operated, in this business, in New London. They are assured that such was not the case. If we, in this small city, have done better in regard to pestilence than has been the case in larger places, it is because we have availed ourselves of highly important truth, in regard to spotted fever, which happened to be known by some of us. That the most judicious, in the great public, will *ultimately* give their verdict in our favor, there is little doubt.

We contend, that a *sickly season, in a given country*, operating as a cause, must have a somewhat common effect upon human vitality, as respects disease, as well as upon vegetation in an agricultural view of the case. Cholera and spotted fever cannot therefore be maladies opposed, in their general nature, to each other. A difference, in human organization, and in intervening causes, is what makes the difference between cholera and spotted fever ; and also any other diversified form of our malignant epidemic. A difference, however, in the constitution of our patients, may vary both the symptoms and the treatment which may be needed. That so highly complicated a machine as man, should be injured and made weaker, and even be made sick, by many combined hurtful causes, is not wonderful. That the feeble and also unacclimated, and those who may be too much crowded in cities, and elsewhere, should be the first to suffer from an unwholesome season and from an

injured vegetation, as the case may be, is equally natural. Such causes diminish the vigor of the human mind as well as the body in seasons of fearful pestilence, even among those in health. When the whole mechanism of human society goes wrong in pestilential times, minds and bodies being weakened, great mortality is not wonderful.

7. I have now shown the resemblance between the Eastern and the Western epidemic. The more difficult task of showing the difference, I leave for nosological writers. This literary labor has already been begun by Dr. Thomas Miner. To this learned gentleman must be conceded the credit of having first published the sentiment that cholera and typhus syncopalis or spotted fever were identical, or nearly so. At least, this concession must be made if it be true that he published that opinion so long ago as 1825.

Is not the question settled forever, by living witnesses and printed records, in favor of the somewhat general nature and domestic origin of our pestilence, and against its supposed importation from Asia or Europe? for the two questions are involved in each other. Has not society already acted too long upon the opinion that the cholera might have come from Asia? At any rate, has it not been shown that what has been called malignant cholera and spotted fever are more near, in alliance, than is the case with the latter and the typhoid pneumonia of this country? These two last forms of complaint have, hitherto, been regarded as nearly identical, by many of our physicians. In this view of the American pestilence, there should be three, instead of two species, besides varieties. I have seen all these three forms of disease in New London, this very season. I believe no person ever thought typhoid pneumonia came from Asia. Why not slander Asia for this calamity, as well as for cholera? This highly frightful sentiment, in regard to cholera or spotted fever, will long be remembered as one of the literary delusions perpetually springing into existence, in consequence of the imaginations of men, and in sequence of their known disposition to refer, for all their evils, to a source foreign from their dear selves. In consequence of the strength of this last disposition in non-professional readers, I shall publish this communication in a Medical Journal; for I choose for my jury medical men, and would have, if I could, those who have often witnessed both bad and common cases of spotted fever and cholera. Those persons, on the one hand, who read much on the cholera, and on the other hand those who read little on the spotted fever; and likewise such physicians as may not, yet, have had an opportunity to witness both maladies, if they must be regarded as such, are far from being impartial judges on the question under discussion. At my somewhat advanced period in life, I might not find motives to trouble the public with this essay, unless I believed that any given number of *such persons* as I have appealed to, would finally agree to the general correctness of my sentiments, and the public be thereby benefited. False sentiments, on many subjects, often become manifest. But with these I have, now, nothing to do, because they do not, in general, kill us.

8. That I am not contending with a man of straw, is thus proved; if proof can be needed. The special medical council of the Board of Health of the city of New York, have recently (September) solicited an answer

from Boards of Health in other cities to the subsequent questions—‘Was there any evidence that cholera was communicated from a foreign source? And have you any facts to prove cholera contagious?’ The idea of Indian or foreign cholera was doubtless in the minds of the Hon. Gentlemen, when these questions were put. There was no need of troubling others with such questions at all, if these individuals had been satisfied that cholera was of domestic origin; or that it might come into existence, in many different places, in some sickly seasons; and that, then, it might be *very rarely* propagated, in those unwholesome places, by sympathy, or mental emotions, or possibly otherwise. Such questions, in my opinion, cannot now need an answer, because they have been already sufficiently answered, if we have reference to either spotted fever or cholera.

I have information from my son, in a letter, dated September 29th, which satisfies me that they have had spotted fever, *including the cholera form*, in New Haven (Conn.), the summer past. This son has seen a considerable number of cases of spotted fever, in New London, and had it himself while here. He has since witnessed the same disease in New Haven. He saw more cholera cases, however, there, than here.

If the Hon. Board of Health of New York had sent their learned commission, Drs. De Kay and Rhineland, to New London, last spring, as well as to Montreal last summer, they would then have had the power of comparison between the epidemics in the two places, by the testimony of eye witnesses of their own choice.

9. If my cause is made good, this communication should be extensively republished, from this Journal. I have myself, for a long time, regarded spotted fever and cholera as one complaint, *at least so far as the general conduct of the community is concerned*; and this opinion has already been given to the public. I have now assigned my reasons, without intentional arrogance, for such an opinion.

New London (Conn.), Oct. 10, 1832.

P. S. I have said nothing in regard to medicinal treatment, because I design to do this in a second edition of my work on spotted fever, if such an edition should be hereafter wanted. E. N.

SALINE INJECTION IN CHOLERA.

Case of Spasmodic Cholera in which the Saline Injection was employed three times in succession—Apparent Improvement—Subsequent Sinking, and Death. By E. G. DAVIS, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

ON Thursday, the 18th ult., at 4, P. M., Mrs. Hanaford, aged 45, living in a small room in the rear of Broad Street, at the foot of a flight of steps leading from Fort Hill, reported to be of temperate habits but to have drank more than usual for some days, was seized with vomiting and purging. She had been affected with diarrhoea the preceding day. I saw her at 8, P. M. She then had the characteristic symptoms of spasmodic cholera: evacuations of the usual peculiar substances from the

stomach and bowels ; cramps of great severity ; cold extremities, with some corrugation of fingers ; lips and areola round eyes livid ; pulse feeble, and soon after imperceptible. The burning at epigastrium, so often observed, was not present. External heat and internal stimuli were administered, without apparent advantage. The cutaneous surface was exceedingly sensitive to heat, as I have found it in similar cases. A sinapism applied to the abdomen caused great distress in a short time, and at her earnest request was removed. The burning produced by it proved the most annoying sensation she experienced. During the night she continued to vomit everything taken, including laudanized potions, brandy and water, &c.

19th, at 7, A. M., the pulse was perceptible ; the vomiting continued. At 8, with the assistance of a professional friend, I injected into the median basilic vein six pints of the following solution, at a temperature of 120 deg. :—R. Mur. Sod. 3ij. Subcarb. Sod. 3i. Aquæ, lb. viij. This produced an alteration for the better in the aspect of the countenance ; the lividity of the lips and round the eyes being succeeded by a natural color. The pulse also became more full ; a change, however, which was not permanent. In the course of half an hour, she had a severe chill, with great agitation, resembling in all respects the commencement of a paroxysm of ague. It was not of long duration. During its continuance, the temperature of the body generally was warmer than natural. The vomiting ceased about 10. At 1, the injection was repeated in same quantity, and followed by another chill, with great dyspnoea and distress in chest, and hot skin. This lasted half an hour ; she then became dull and lethargic, and so continued till night. When last seen in evening, she was pulseless, but quiet, and had nothing of the characteristic appearance of cholera. Two dejections during day.

20th, 7, A. M. There had been some vomiting and purging through the night ; the former principally of the fluids taken. Her extremities cold, no pulse at the radial artery, but expresses herself better. During the forenoon, some nutritious liquids administered were instantly rejected. Toward evening effervescing draughts were directed, which were retained better.

21st, 7, A. M. She was found quiet and free from pain. Countenance tranquil ; skin of extremities cool, not cold ; had been without pulse for thirty-six hours. At 9 o'clock, after a consultation on her case, I gave the saline solution to the amount of four pints, at the same temperature as before. This was followed by chill, commencing twenty minutes after operation was concluded, and continuing an hour. During this the extremities remained cold, the trunk becoming hot and continuing dry. No reaction followed. The pulse could be felt, but fluttering. In the afternoon she became drowsy, and in the evening lay on her back with the feet drawn up, breathing rather deeply, with surface universally warm, and pulse at 100, having had no vomiting or purging during the day. She had on the whole the aspect of a patient in typhus, when the comatose stage has supervened.

22d, 7, A. M. She appeared better. The tongue was cleaning, and the surface uniformly warm. At noon she vomited, and threw up yellow bilious matter, partly fluid and in part viscid, adhering to the surface of

the vessel. Soon after a bilious discharge took place from the bowels. After this she vomited about every hour, the discharges from the bowels continuing occasionally through the day. The pulse in the mean time became regular at 90. In the evening the skin was cooler, the countenance more sunk, and the whole aspect of the case less favorable.

22d. From 7, A. M. to 6, P. M. dejections three, bilious ; vomiting frequent, and of same character as that mentioned already. The renal secretion returned after being suspended, or nearly so, from the commencement of the attack. The pulse fell from 90 to 70, becoming feeble. In evening respiration labored, as much so as at any time since operation ; mind feeble and wandering ; voice a whisper ; tongue clean, dry ; complains of throat ; fauces, on examination, appeared inflamed ; can retain nothing on stomach. From 6 to 11, P. M. no vomiting ; voice hoarse ; urinary secretion continued.

23d. Four bilious discharges from bowels, and urine in natural quantity. No vomiting or nausea. Respiration laborious when asleep ; pulse 70 to 80 ; mind clear ; sleeps much ; articulates with difficulty ; skin warm, moist ; complains most of weariness from lying.

25th. In most respects appeared to improve. The tongue became moist at the margin ; the inflammation of the fauces diminished ; no vomiting or purging during day, but great distress about epigastrium, with some tenderness on pressure ; pulse about 72 ; respiration more tranquil ; lethargic. Took thin decoction of arrowroot, with wine, through the day.

26th. In the morning evidently appeared worse, though many particular symptoms remained favorable. The pulse about 70, more feeble ; deglutition more difficult ; drowsiness continued, but when awake she complained of the same distress, which she refers to 'heart.' The respiration is more labored, as if it was difficult to obtain sufficient air to supply the blood in the lungs. In the evening she was more sunk, with obvious difficulty in chest. The pulse became irregular and extremely small, with a peculiar heavy dull bound of the heart against the paries of the chest, which has not before been noticed.

27th. The distress in the thorax was reported to have been severe during night, and in the morning the dyspnoea had decidedly increased ; the respiration was long, slow, and deep, the conjunctivæ injected, and the pulse nearly imperceptible. She died at 9, A. M.

In giving the above account, all particulars respecting the treatment have been purposely omitted, except where some distinct effect appeared to be produced by it. As respects the injection, it would seem that the effects of it had been less immediate in this case than in many others, and it even remains uncertain to what extent the good effects which followed were attributable to its influence. It is on the whole more remarkable that life could have been preserved so long, when the system had once been so completely prostrated, and the vital powers rendered incapable of rallying to any purpose, than that the termination of the case should have been eventually fatal. The distinct occurrence of chill, as an effect of the injection, is on the whole the most valuable fact in a pathological view presented by the case. It obviously suggests venous congestion as the proximate cause of this affection, when occur-

ring under other circumstances ; and furnishes a ready explanation why the abstraction of blood in the cold stage should be found so frequently to cut short the fit. Whether bleeding was indicated in the present case, I shall not undertake to determine. In the first and second operation, considerable quantity was discharged from the orifice ; in the third, the patient was so much exhausted that it appeared best to allow the paroxysm to pursue its natural course.

Boston, November, 1832.

PRATT'S ARTIFICIAL NIPPLE.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Seeing some time ago an account of an artificial nipple which you recommended very highly, I was induced to procure one at some trouble, for trial in a case of sore nipple, the most painful that had ever come to my knowledge. I followed the printed directions that came with the machine very closely, and no words can express the degree of comfort it has afforded my patient. She is overjoyed that such a thing exists, and is desirous, and so am I, that every mother who has a sore nipple should avail herself of a relief so cheap and effectual. The babe nurses freely and easily by means of this instrument, and without giving the least possible uneasiness either in drawing or letting go the breast. I paid eight shillings for this instrument, and the mother says she would not be without it for thrice as many dollars. Her breast is healing rapidly ; and I hope the motive with which I make this communication will excuse its brevity and simplicity. My object is to invite the attention of my brethren to the only *certain* cure for sore nipples that I have ever met with.

Yours, &c.

RUSTICO MEDICUS.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 14, 1832.

DEATH OF DR. SPURZHEIM.

It is our melancholy duty to record the death of a great and good man. Dr. SPURZHEIM, so well known in Europe and America as the companion of Dr. Gall—as a deep thinker and close observer of human nature—as an interesting teacher of moral and intellectual philosophy, and the author of several works on the anatomy and physiology of the brain and nervous system,—so highly esteemed for his eminent social virtues and moral worth, and so much beloved by all who shared his friendship, has been prematurely removed from this new scene of his contemplated labors.

He died on Saturday evening, at his residence in Pearl Street, after an illness of about four weeks, deeply lamented by the friends he had made during his short residence in this city; his decease will also be a source of sorrow and disappointment to the inhabitants generally, not only of Boston, but also of other cities in other States, where his visits have been solicited, and anticipated with unusual interest.

Dr. S. was born near Treves, in Germany, in 1776. He arrived in this country in September last. Just three weeks ago this day he delivered his last lecture. He was then evidently laboring under serious indisposition, contracted by occasional exposure to the cold night air after being much heated at his lectures. The greater part of Wednesday night he was disturbed by rigors and restlessness; and although too ill to leave his apartments the next day, he was unwilling to submit himself to active medical treatment. This unwillingness was not removed until his disease, which was a typhous fever, had so far advanced that his medical attendants deemed it too late to expect benefit from medication. His brain was chiefly implicated, his reason departed, and he died without apparent suffering. He was anxious to live to accomplish the great moral purposes he had in view, but looked upon death without dread, and with that composure and serenity which might be expected from a Christian philosopher.

On the morning after his decease, his friends assembled at his apartments to consider what proceedings were rendered necessary and proper by this melancholy event; and it was decided that the body should be examined and embalmed, and a bust taken, under the direction of Drs. J. C. WARREN, J. JACKSON, G. C. SHATTUCK, W. CHANNING, G. PARKMAN, J. WARE, E. REYNOLDS, C. ROBBINS, W. LEWIS, J. G. STEVENSON, J. FISHER, W. GRIGG, and S. G. HOWE.

The care and conduct of the funeral obsequies were committed to Hon. J. QUINCY, President of Harvard University, Hon. H. G. OTIS, N. BOWDITCH, LL.D., JOSEPH STORY, LL.D., J. TUCKERMAN, S.T.D., CHARLES FOLLEN, J.U.D., J. BARBER, M.D., CHARLES BECK, J.U.D., and W. GRIGG, M.D.

It was further provided, that the papers, casts, and other property of the deceased, should be committed to JOHN PICKERING, LL.D., N. BOWDITCH, LL.D., T. W. WARD, Esq., and NAHUM CAPEN, Esq., to make such disposition of the same as the law provides in such cases.

It is understood that the remains of the deceased will be interred at Mount Auburn, and an address made on the occasion by a gentleman who enjoyed a large share of his friendship, and was particularly acquainted with his great and important purposes, as well as his private feelings and character.

The medical gentlemen above named proceeded, without delay, to execute the trust committed to them. A good cast has been taken, as well as several portraits. The appearances on examining the brain were such

as are usually attributed to congestion; the minute vessels of the membranes being strongly injected, and presenting an appearance of unusual redness. The edges of the valves of the aorta were slightly indurated, and extensive adhesions of the omentum to the parietal peritoneum about the right iliac region indicated some recent or remote morbid action in that part. Further than this we could discern no mark of disease in any organ that was examined, although three peculiarities of structure were remarked;—one, the unusual size of the aorta, and the natural and proportional, not morbid, thickness of its coats; the second, the smallness of the arteria innominata, which was no larger than the left carotid or left subclavian; and the third, a bilobate spleen. It should be remembered that the destination of the body precluded the possibility of a very minute examination of the two most important organs.

Obituary.—It is with unfeigned sorrow, says the *Medico-Chirurgical Review*, we record the death of a young, but a most zealous and talented physician of Birmingham, Dr. Josias Allsop, who fell a victim to the fatal epidemic, on the 6th of August last, after a short illness. He had been at Tipton (a village about 9 miles from Birmingham) where cholera was raging violently, and attended the poor there, day and night, for a fortnight, scarcely allowing himself any time for repose. He returned home on Saturday night, the 4th of August, greatly jaded and fatigued, observing to his wife that he had not had more than three hours' sleep during the preceding week. On Sunday morning he seemed drowsy, but he dressed and went out to see some patients—returned to dinner—and appeared to have regained his strength and spirits. At 9 o'clock in the evening he ate a hearty supper, and retired to rest about 10 o'clock, apparently in health. At 4 o'clock in the morning he was called out of bed to see some patients, and returned at 6 o'clock. His wife, who had been recently confined of her third child, was soon informed by the nurse that her husband was very ill, and she instantly arose and went to him. The unfortunate lady was horrified at beholding her husband sitting up in bed, more like a corpse than a living being, and taking down notes of his own case! He expressed himself glad at having an attack of the epidemic, and said he would now be able to understand and to treat the disease better than before. But he soon became extremely weak, and gave up his pen to his wife, while he dictated to her the symptoms which he felt. The violence of the cramps soon compelled him to give over this task also, and after severe sufferings for some hours he fell into a state of insensibility, from which he never after recovered. Thus perished, at the early age of 27 years, a most accomplished and intelligent physician, who, we have no doubt, fell a victim to his zeal in the investigation of a mysterious epidemic. Dr. Allsop wrote several papers on cholera in the *London Medical Gazette*, and was the author of the article, 'Progress of Cholera in England,' from page 645 to 674 in the last vol. of the *Medico-Chirurgical Review*, bearing the signature A.

SIR EVERARD HOME recently died at Chelsea, England, in the 77th year of his age. Sir Everard was of Scotch extraction, and his connection with the Hunters brought him into notice at an early period. He was appointed one of the Surgeons of St. George's Hospital, and is well known as the author of various works.

Excision of the Head of the Femur.—Mr. White, of the Westminster Hospital, is said to have removed four inches of the femur in a very bad case of hip disease, which in all probability would have terminated fatally. The boy's health improved after the operation, and a very useful joint was formed between the upper extremity of the femur and pelvis. The limb was not so much shorter than the other as might be expected from the length of the removed portion of bone. The boy at the period of the operation is said to have been about fourteen; he lived eight years after, having the perfect use of the limb, and then died of phthisis.

The whole pelvis, joint, and upper part of the thigh, were removed after death, and are deposited in the Museum of the College of Surgeons.—*Med. Gaz. March, 1832.*

Preservation of Plants during Winter by Spring Water.—A horticulturist in Scotland has availed himself of the heat of spring water, in the preservation of delicate plants. He places boxes of pine wood over the water, covering them with some coarse stuff, and in these boxes he places pots of cauliflowers, lettuce, various sorts of pelargoniums, Indian chrysanthemums, Chinese primroses, &c.; and by this simple and economical method, preserves them all winter. He is of opinion that by means of the temperature of running water, winter gardens may be constructed for a farm or village. Care must be taken to renew the air in the boxes.—*Bib. Univ.*

Whole number of deaths in Boston for the week ending Nov. 9, 42. Males, 26—Females, 16. Of consumption, 11—fits, 1—lung fever, 5—intemperance, 3—croup, 2—hooping cough, 3—inflammation in the bowels, 2—tumor, 1—old age, 1—cholera malignant, 1—dropsy, 1—liver complaint, 1—infantile, 2—dropsy on the brain, 2—quinsey, 1—jaundice, 1—typhous fever, 3—palsy, 1.

ADVERTISEMENTS.

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P. CLEVELAND, Secretary.

Brunswick, October 8, 1832.

Oct. 31. cop5t.

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